(No Model.) 2 Sheets—Sheet 1.

J. H. McGEE.

BOW FACING OAR.

No. 355,879. Patented Jan. 11, 1887.

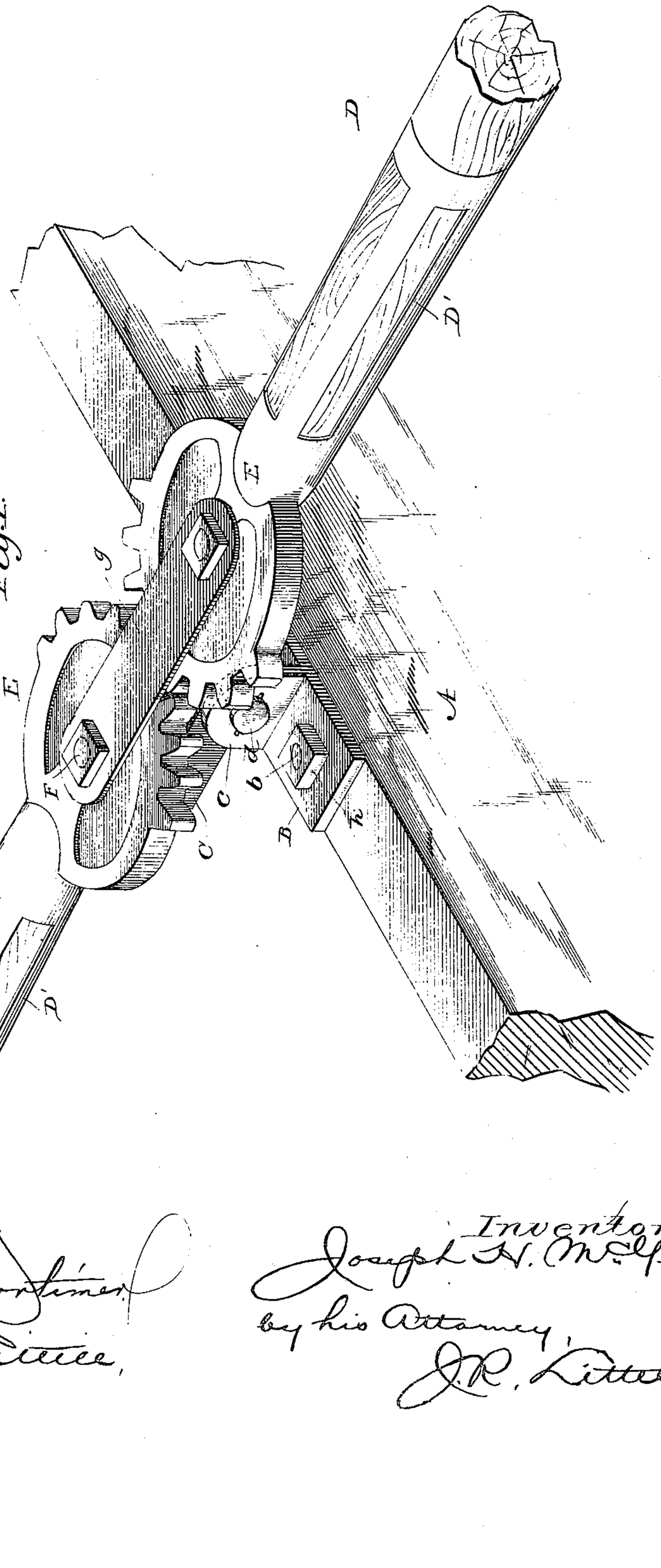

Fig. 1.

Witnesses:
W. H. Mortimer,
Wm. J. Littlee,

Inventor:
Joseph H. McGee,
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(No Model.) 2 Sheets—Sheet 2.

J. H. McGEE.

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Fig. 2.

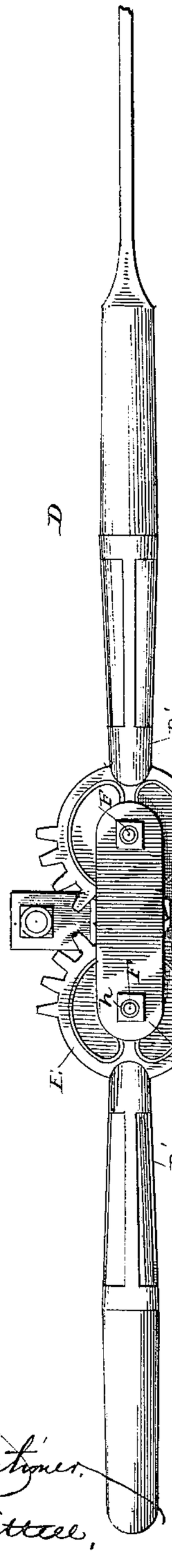


Fig. 4.

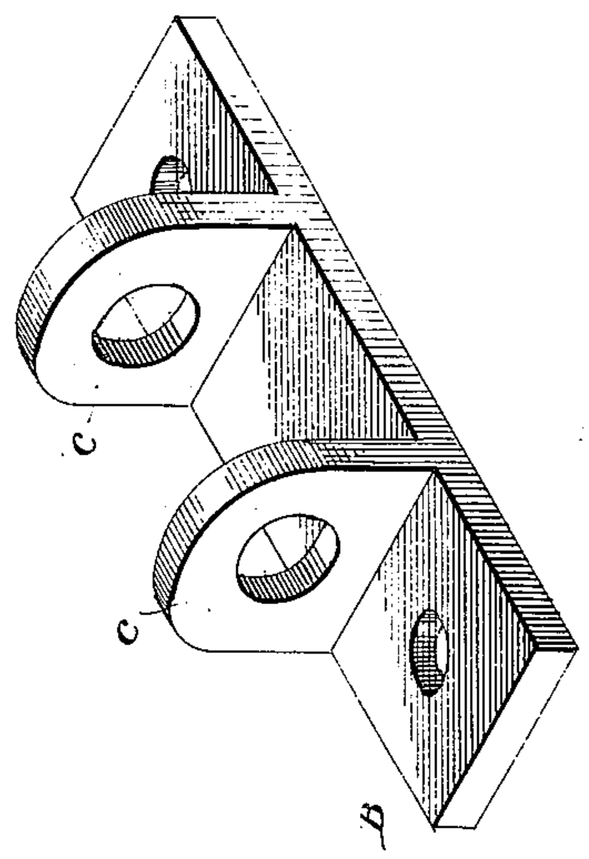
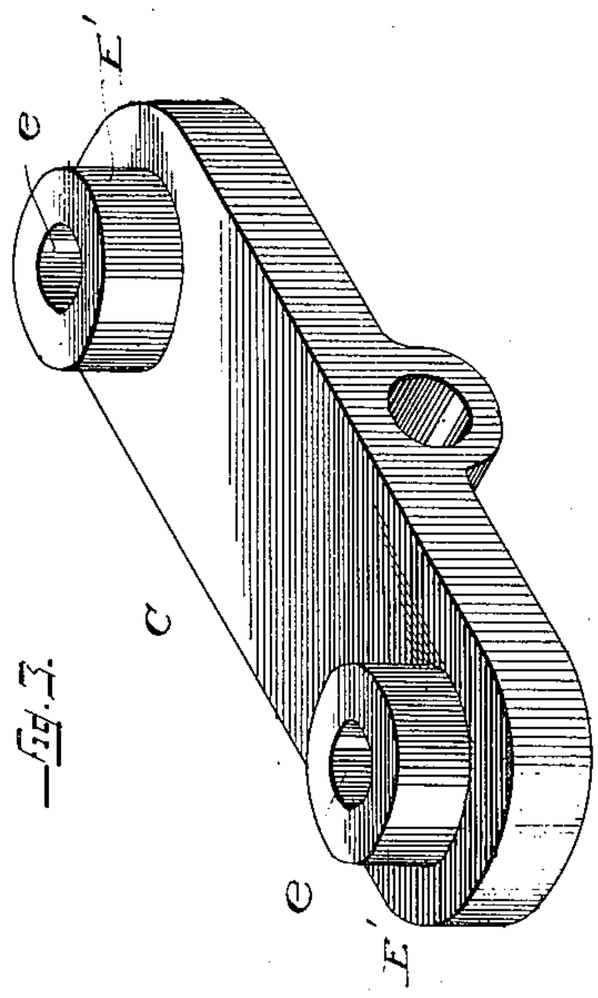


Fig. 3.



WITNESSES

Wm. W. Mortimer.

Wm. J. Littlee.

Joseph H. McGee,

INVENTOR

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UNITED STATES PATENT OFFICE.

JOSEPH H. McGEE, OF MANCHESTER, IOWA.

BOW-FACING OAR.

SPECIFICATION forming part of Letters Patent No. 355,879, dated January 11, 1887.

Application filed July 21, 1886. Serial No. 208,664. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. McGEE, a citizen of the United States, residing at Manchester, in the county of Delaware and State of Iowa, have invented certain new and useful Improvements in Oars; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to oars for row-boats, the object being to provide devices of this character whereby the boat may be propelled with the oarsman looking forward or ahead, thus obviating the necessity of turning, as is necessary in the use of oars as ordinarily constructed.

A further object of the invention is to provide oars which shall be simple in their construction, cheap to manufacture, strong and durable, effective in their operation, and not likely to get out of order.

With the above objects in view, the invention consists in the improved construction and combinations of parts hereinafter fully described, and pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a portion of the gunwale of a boat with my improved oar secured thereto. Fig. 2 is a plan view. Fig. 3 is a detail view of the plate to which the oars are connected, and Fig. 4 is a detail view of the base-plate.

Corresponding parts in the several figures are denoted by the same letters of reference.

Referring to the drawings, A represents the gunwale of the boat, and B represents a plate provided near each end with an opening, *a*, through which openings extend bolts *b*, for securing the plate to the gunwale. Formed integral with and extending upwardly from the plate B, near the ends thereof, are perforated ears or lugs *c*, as shown, in which ears or lugs is journaled a pivot-bolt, *d*.

C represents a bracket or casting, which has an opening near its lower end to receive the pivot-bolt *d*, and said bracket or casting is provided near each end with a hole or opening, *e*.

D represents one of the oars, which consists of a handle and a blade-section, said sections having their inner ends fitted in ferrules D′, which are slotted along their sides to make them as light as possible. These ferrules have formed integral with them, at their inner ends, segment-gears E, which are adapted to mesh with each other. The segment-gears have centrally-located holes or openings, and are located upon the bracket or casting C, as follows:

Rollers E′ are placed upon the upper side of the bracket or casting C, and said rollers have openings to register with those of the bracket or casting, and said rollers are adapted to fit in the holes or openings of the segment-gears.

Bolts F pass through the openings in the rollers and in the bracket-casting and have heads at their lower ends. On the upper ends of the bolts is located a plate, *g*, which connects the bolts, and thus holds the segment-gears in place, nuts *h* being provided on the upper ends of the bolts to hold said plate in position, as shown.

The operation of the invention is obvious. The oarsman sits facing the bow of the boat, and by operating the handle-sections of the oars the blades are moved in a reverse direction, a free movement being allowed the oars in both a vertical and horizontal direction.

I am aware that various devices have heretofore been employed for bow-facing oars, comprising a base-plate, a bracket pivotally connected therewith, and segment-gears pivoted to the bracket. I therefore do not broadly claim such construction.

Having thus described my invention, what I claim is—

1. The combination, as an improvement in bow-facing oars, of the base-plate having the upwardly-projecting perforated ears, the bracket having a transverse opening at its lower end, said portion being disposed between the ears, the pivot-bolt passing through the ears and through the opening in the bracket, and the segment-gears pivoted on top the bracket, substantially as and for the purpose set forth.

2. The combination, as an improvement in bow-facing oars, of a base-plate, a bracket pivoted thereto and carrying rollers at its ends, and the segment-gears pivotally connected to the base-plate above said rollers, substantially as and for the purpose set forth.

3. The combination, as an improvement in bow-facing oars, of a base-plate, a bracket pivoted thereto and having openings at its ends, the rollers having corresponding openings, the

segment-gears disposed above the rollers, and pivot-bolts passing through the openings of the bracket and rollers and through the segment-gears, substantially as and for the purpose set forth.

4. The combination, with a base-plate, of a bracket pivoted thereto, rollers on the bracket, the segment-gears, the latter having openings to receive the rollers and securing-bolts, substantially as set forth.

5. The combination, as an improvement in bow-facing oars, of the base-plate having the ears, the bracket pivoted between said ears, the rollers at the ends of the bracket, and the segment-gears disposed above the rollers and having openings to receive the same, the pivot-bolts passing through the gears, rollers, and bracket, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH H. McGEE.

Witnesses:
W. M. MARVIN,
R. M. MARVIN.